

## News from the Savannah River National Laboratory

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### SRNL DEVICE FOR SAMPLING STORAGE DRUMS LICENSED BY FLORIDA COMPANY

AIKEN, S.C. – A device invented at the U.S. Department of Energy's Savannah River National Laboratory for sampling drums of stored material has been licensed to a maker of waste storage and related equipment, for manufacture and sale to customers in the environmental and other industries. UltraTech International, Inc., of Jacksonville, Fla., entered into an agreement with Washington Savannah River Company, the company that operates SRNL for the DOE, for a device that safely and efficiently vents or samples storage drums remotely.

Like many SRNL inventions, this device was created to meet a specific need at the Savannah River Site, but has applications well beyond the Site and its specialized operations. The Site had stored drums of heavy water, which had been used to cool the Site's reactors during the years that they operated. A method was needed to sample the headspace in the drums – the area between the surface of the stored liquid and the top of the drum – to determine what gases were present. In particular, they needed a way to perform this sampling while protecting employee safety and the environment, and without damaging the expensive stainless steel drums.

The resulting device, invented by SRNL's Kevin Counts, combines a gas collection tube with a special nonsparking punch. Workers put the device in place on the drum, then move to a safe location, where the device is activated. The gas collection tube seals against the drum plug, then the punch punctures the plug, leaving the rest of the drum undamaged. Gases in the drum flow through a slot in the punch into the collection tube, then are either captured in a container for sampling or vented through a hose assembly to a safe location.

The device would be useful in any operation that requires the sampling or venting of drums. In the environmental management field, for example, drums of waste are routinely sampled and vented. The device can also be used for checking pressure buildup in drums.

UltraTech International, Inc. manufactures over 350 products in the areas of radwaste management, spill containment, facility protection and stormwater management. SRNL's sampling device will help expand UltraTech's line of radwaste filters designed for transuranic waste drums. The device will allow end users to have an important option when seeking to sample headspace gas in drums without any filter or bung openings. The product addition will also help enhance UltraTech's position as a one-stop shop for filter vents for DOE applications.

### WASHINGTON SAVANNAH RIVER COMPANY



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SRNL Device for Sampling Storage Drums Page 2 of 2

SRNL is the applied research and development laboratory at the U.S. Department of Energy's Savannah River Site, providing practical technology solutions in the areas of energy security, national and homeland security and the environment. Washington Savannah River Company, a subsidiary of Washington Group International, operates SRNL for DOE.

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